

PATENT

Serial No.: 09/ 665,978

Group No.: 2855

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Amendments to the Specification

Please enter the following amendments to the Specification:

On page 7 in the Brief Description of the Drawings, please substitute the following paragraph for the paragraph beginning with "Figure 2.":

A Figure 2. A schematic top view of another embodiment of the instant invention with the deflection element having a polygonal ring structure.

On page 9 and continuing onto page 10, please substitute the following paragraph for the paragraph at the bottom of the page beginning with "The deflection element, comprising a set of anchor sites...":

A2 The deflection element, comprising a set of anchor sites and a set of input sites, is preferably a high-compliance deflection element. By high-compliance is meant that the deflection element has an effective spring constant much smaller than that of an equivalent solid deflection element. In essence, the holes and other features introduced into a high-compliance deflection element introduce low-stiffness bending modes into an otherwise solid deflection element, and these low-stiffness bending modes dramatically decrease the effective spring constant. For example, in the implementation of figure 1, the ring 102 can easily elongate under applied stress - typically orders of magnitude more easily than if the ring were replaced by a solid disk. Note that many shapes and configurations beside the annulus or ring can be used to obtain a high-compliance deflection element. For example, figure 2 shows a high-compliance deflection element having the shape of a regular polygon.

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On page 13, please substitute the following paragraph for the abstract:

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A new class of micromechanical dynamometers has been disclosed, ~~said-dynamometers being which are~~ particularly suited to fabrication in parallel with other microelectromechanical apparatus. Forces in the microNewton regime and below can be measured with such instrumentation dynamometers which are based on a high-compliance deflection element (e.g. a ring or annulus) suspended above a substrate for deflection by an applied force, and one or more distance scales for optically measuring the deflection.

A 3

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